

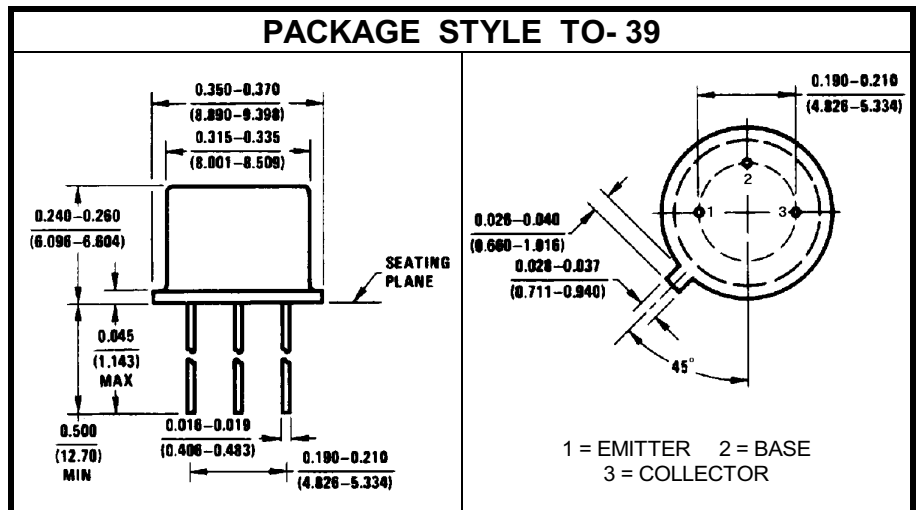
# SILICON NPN TRANSISTOR

**DESCRIPTION:**

The **2N2243A** is Designed for General Purpose Amplifier and Switching Applications.

**MAXIMUM RATINGS**

$I_C$	1.0 A (PEAK)
$V_{CE}$	80 V
$P_{DISS}$	2.8 W @ $T_C = 25^\circ C$
$T_J$	$-65^\circ C$ to $+200^\circ C$
$T_{STG}$	$-65^\circ C$ to $+200^\circ C$
$\theta_{JC}$	$62.5^\circ C/W$


**CHARACTERISTICS**  $T_C = 25^\circ C$ 

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 25\text{ mA}$		80			V
$BV_{CBO}$	$I_C = 100\ \mu A$		120			V
$I_{CBO}$	$V_{CB} = 60\text{ V}$				0.01	$\mu A$
	$T_A = 150^\circ C$				15	
$BV_{EBO}$	$I_E = 100\ \mu A$		7.0			V
$I_{EBO}$	$V_{EB} = 5.0\text{ V}$				0.05	$\mu A$
$h_{FE}$	$V_{CE} = 10\text{ V}$	$I_C = 100\ \mu A$	1530			
		$I_C = 10\text{ mA}$	30			
	$V_{CE} = 1.0\text{ V}$	$I_C = 10\text{ mA}$	20			
		$I_C = 150\text{ mA}$	30			
		$I_C = 500\text{ mA}$	15			120
$V_{CE(SAT)}$	$I_C = 150\text{ mA}$	$I_B = 15\text{ mA}$			0.25	V
$V_{BE(SAT)}$	$I_C = 150\text{ mA}$	$I_B = 15\text{ mA}$			1.3	V
$f_t$	$V_{CE} = 10\text{ V}$	$I_C = 50\text{ mA}$	$f = 20\text{ MHz}$	50		MHz
$C_{ob}$	$V_{CB} = 10\text{ V}$		$f = 1.0\text{ MHz}$		15	pF